

REMARKS

Reconsideration of this application is respectfully requested. The references identified on page 10 of the application have been included in a concurrently filed Information Disclosure Statement, to the extent that those references represent prior art to this application.

Approval of the drawing change to Figure 4 is requested to overcome the objection to the specification regarding the lack of an express showing of a cooling passage port. As can be seen from Figure 4, the cooling passage port is the lateral end of the air gap 88.

The abstract has been amended in the manner suggested by the Office Action. Similarly, the specification has been amended to include an express disclosure of a cooling passage port.

The rejection of claim 1 as being indefinite for use of the term "impervious" is traversed. The term "impervious" is defined in the dictionary as "not allowing entrance or passage through." Webster III New International Dictionary, page 1134 (1993). This definition is appropriate to describe the present rotor which does not allow the passage of cooling gas into the rotor. The definition of "impervious" does not preclude heat exchange between the gas flowing on the outside surface of the rotor and the rotor itself. Whether heat exchange occurs between the rotor and cooling gas is irrelevant to the present invention. The term "impervious" in the limitation "wherein said rotor being impervious to said cooling gas" accurately describes the condition where the rotor does

not allow cooling gas to flow into the rotor, as is done in prior art rotors. Accordingly, the indefiniteness rejection should be withdrawn.

The rejection of claims 1 and 3-20, and 23 as being obvious over Semba (U.S. Patent No. 6,201,323) in view of Laskaris et al (U.S. Patent No. 5,548,168 – Laskaris '168) is traversed.

Semba does not disclose or suggest "a rotor cooling system in which a cooling fluid, such as a cryogenic cooling liquid" flows through the rotor in an entirely separate and independent cooling system to that of the stator ventilation system. Moreover, Laskaris '168 does not address how to cool a stator. It is hindsight to assume that when retrofitting a conventional generator with a superconducting rotor, that the stator cooling system will be a ventilation system independent of the rotor and the rotor will be a cryogenic cooling system. Absent some teaching as to suggest the use of a stator ventilation cooling system in conjunction with an independent rotor cryogenic cooling liquid system, there is no teaching or suggestion of the present invention.

Further,

Independent claims 11 and 20, and dependent claim 4 have been amended to require multiple baffle chambers (see baffle chamber 94 in Figures 4 and 5 and at para. 33) at the outer periphery of the stator, wherein one of the chambers has an input open to a source of cooling gas, e.g., a heat exchanger or ambient air, and a second of the chambers has an input port open to the first chamber. Semba does not suggest a baffle chamber having one chamber that has an input port open to another chamber. Rather,

Semba discloses baffle chambers that are all open to a source of cooling gas or that provide a exhaust for heated cooling gas.

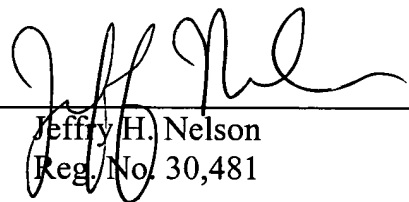
Further, claims 3, 11 (independent) and 20 (independent) have been amended to make clear that substantially all of the cooling gas flows through the stator, into the air gap and out the air gap exit. This is contrary to the multi-flow ventilation system disclosed in Shemba in which cool gas flows in different directions through different stator cooling passages. The one Shemba embodiment (see Fig. 9) that discloses single-direction flow ventilation also does not baffle chambers that allow cooling gas to flow between the chambers.

Accordingly, all claims are in good condition for allowance. If any small matter remains outstanding, the Examiner is requested to telephone applicants' attorney. Prompt reconsideration and allowance of this application is requested.

Respectfully submitted,

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IN THE DRAWINGS

The attached replacement sheet of drawing include change(s) to Fig. 4. The replacement sheet, which includes Fig. 4, replaces the original sheet including Fig. 4.

Attachment: Replacement Sheet(s)